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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,672	10/23/2001	Stephen Williams	00-507	2450

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EXAMINER
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PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/002,672

Applicant(s)

WILLIAMS ET AL.

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 6-9 and 12-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

Applicants' response of 12/3/03 has been considered with the following results.

1. Claims 16-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 3. This is not found persuasive because contrary to applicants' conclusion, and in accordance with MPEP §803, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate statutes in the art, or a different field of search as further defined in MPEP §808.02.

In the previous OA, the examiner indicated the separate classification of the inventions presented by applicants. It logically follows that the search of both inventions are different, and as shown by the separate classifications have a separate status in this art.

The requirement is still deemed proper and is therefore made FINAL.

### Claim Objections

2. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. This claim attempts to introduce a product (record medium) dependent upon a method parent claim. Hence such is improper.

### Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim is written/presented as a single means claim. Applicants' attention is drawn to *In re Hyatt, 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983).*

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 4, 5, 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 4 and 5, the ultimate line recited in claim 4 does not follow from the steps, that is, there is no step of determining/detecting/recognizing an "elapsed duration" of the signal in question. True, there is a timing ability, but nothing else. Claim 5 does not clarify the above and falls with its respective parent claim.

The examiner is not certain as to what applicants' intend to introduce into claim 9. If such is merely drawn to a record medium – see the above objection to this claim. However, as written, it is not seen how the record medium can execute any steps of claim 1. That is, a record medium by itself performs no steps. If applicants' were attempting to introduce/include a computer in order to perform the steps of claim 1, then the examiner would introduce an insufficient disclosure rejection/lack of written description, since no computer or program/algorithm<sup>has</sup> been disclosed to perform the above noted steps.

As far as the claims recite positive limitations and are interpreted by the examiner, the following rejections are made.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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**Claim Rejections - 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-4 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eom and either Katoh, or Shim.

As noted/disclosed in Eom, a pll for detecting the loss of wobble signal is appropriately detected.

The examiner interprets the "intermittent clock" signal of claim 1 as the wobble signal, and that ~~the~~ <sup>the</sup> during initiation of the system (asynchronous mode) is the starting mode. Hence, as operation is initiated, the first step of claim 1 is met, "seeking to acquire phase lock" and that when the wobble signal is absent,

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not present during the window period of Eom, the phase lock loop is held (since phase lock has yet to occur) is a free-running (open loop) state.

With respect to claim 2, the initial start up state is interpreted as the "asynchronous mode".

Alternatively if applicants can convince the examiner that the start up condition is not the asynchronous mode, then the examiner would rely upon applicants' description of such/ as indication of such a well-known initial period. It would have been obvious to modify the base system of Eom with an initial start up mode, since all systems start from an initial/asynchronous mode.

With respect to claim 3, the "geometric eccentricity" is interpreted as the wobble signal.

With respect to claim 4, the examiner interprets the operation of figure 4 as establishing the ability to time the clock signal (wobble) as well as having the system in an unlock state during an elapsed time of such – see col 4 line 44 plus. Although there is no "header" clearly depicted, the existence of "header" signals in this environment is considered to be inherently present in the Eom system – dvd-r. Alternatively if applicants' can convince the examiner that such "header" does not exist then the examiner would rely upon the teaching from either Shim, or Katoh, which teach in this environment dvd-r the existence of "header".

It would have been obvious to modify the base system of Eom with the additional teaching from either Shim or Katoh, motivation is to use existing dvd signal format and save valuable resources is not having to create a new dvd-r format, i.e., use existing formats and hence also increase the flexibility to Eom so as to be used in existing system.

With respect to the single means of claim 10, it is met by the Eom system.

12. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Katoh.

Applicants' attention is drawn to figures 2, 6, or 8 which depict the unlock (which the examiner interprets as the "free-running" state of the pll when the wobble signal is lost/absent.

The examiner interprets the period prior to t0 as the initial start up mode, which provides for the asynchronous mode limitation of claim 2. With respect to claim 3, the wobble signal is interpreted as the claims geometric eccentricity.

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13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1-3 as stated in paragraph 12 above, and further in view of either Shim/Minamino et al.

As interpreted, claim 4 requires the phase lock loop to be in the free-running (unlocked) mode/state prior to the arrival of a header. Although Katoh provides for such an unlock state, there is no clear depiction of "timing" such a duration. Katoh does provide for a frequency and phase comparison during appropriate periods of the clock signal.

Either Shim or Minamino et al teach in this environment the ability of having "windows" for the appropriate signal under consideration.

It would have been obvious to modify the base system of Katoh with such windowing (interpreted as meeting the timing of the clock signal) motivation is to appropriate sample/review the signal under consideration and hence provide for an adaptive system.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 4 as stated in either paragraphs 11 or 13 above, and further in view of Katoh.

With respect to claim 5, Katoh discloses providing for an identification of the re-emergence of the signal in question – note the various hold periods between the headers as noted in figure 6. The examiner interprets this figure to depict an acquisition of the phase lock after the wobble signal between headers 26 and 27. That is the examiner interprets a wobble signal existing prior to header 26.

15. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eom further considered with Shim.

The ability of having a counter for the clock signal in this environment is taught by Shim – see the operation of his circuit 1120.

It would have been obvious to modify the base system of Eom and modify it with the above noted teaching from Shim, motivation is to provide for appropriate designated time counts for subsequent tracking servo control as noted in Shim.

16. *Inokuchi et al is cited as illustrative of a L16 detector system with appropriate sync detection.*

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***Allowable Subject Matter***

<sup>17</sup>  
~~16.~~ Claims 6-9 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and correct/overcome and 112 rejections of their respective parent claim.

**Hard copies of the application files are now separated from this examining corps, hence the examiner can answer no questions that requires a review of the file without sufficient lead-time.**

**Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2653



AMP